

DEPARTMENT OF HEALTH SERVICES

714/744 P STREET
P.O. BOX 942732
SACRAMENTO, CA 94234-7320



(916) 445-0498

November 24, 1993

Ms. Barbara Smith
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Dear Ms. Smith:

The Department of Health Services conducted an independent tritium soil sampling activity to confirm the results of the analysis by the Navy around Building 816 at Hunters Point. Enclosed are the details of the sampling activity and the results of the analysis.

Based on these results, we confirmed that the tritium sampling program of the Navy surrounding Building 816 at Hunters Point is satisfactory.

If you have any questions concerning this letter, please telephone me at (916) 322-2183.

Sincerely,

A handwritten signature in black ink, reading "Steven A. Book".

Steven A. Book, Ph.D.
Special Assistant
Environmental Radiation Programs
Division of Drinking Water and
Environmental Management

Enclosure

cc: Cyrus Shabahari, DTSC
John Adams, SWB
Mike McClelland, WESTDIV
Steve Dean, EPA:R9 ✓
Fil Fong, RHB-B
Norris J. Parks, SRL-B

Department of Health Services Confirmatory Soil Sampling Around
Building 816 at Hunters Point Annex

On August 13, 1993 the Department of Health Services conducted confirmatory soil sampling for tritium around Building 816 at Hunters Point Annex. Observers at the sampling were Dean Chaney, USNRC Region V, and Michael McClelland, USN WESTDIV.

Prior to collecting any soil, the immediate area surrounding each sampling point was surveyed with the Ludlum Micro R Meter, Model 19, S/N 80382. This meter was last calibrated 2/12/93 and the next calibration date will be 2/12/94. The purpose of this survey was to assure the sample will not contain unreasonable gamma emitting material (natural or manmade) which might influence the radioanalysis. This survey showed no sampling point had a reading greater than 10 uR/hr and the readings were between 5-10 uR/hr.


The soils were collected with with a garden trowel and deposited into a screw cap glass container. Each filled glass container was marked, placed into a plastic bag and the bag tapped sealed. After each sample the trowel was rinsed with clean tap water and tissue dried.

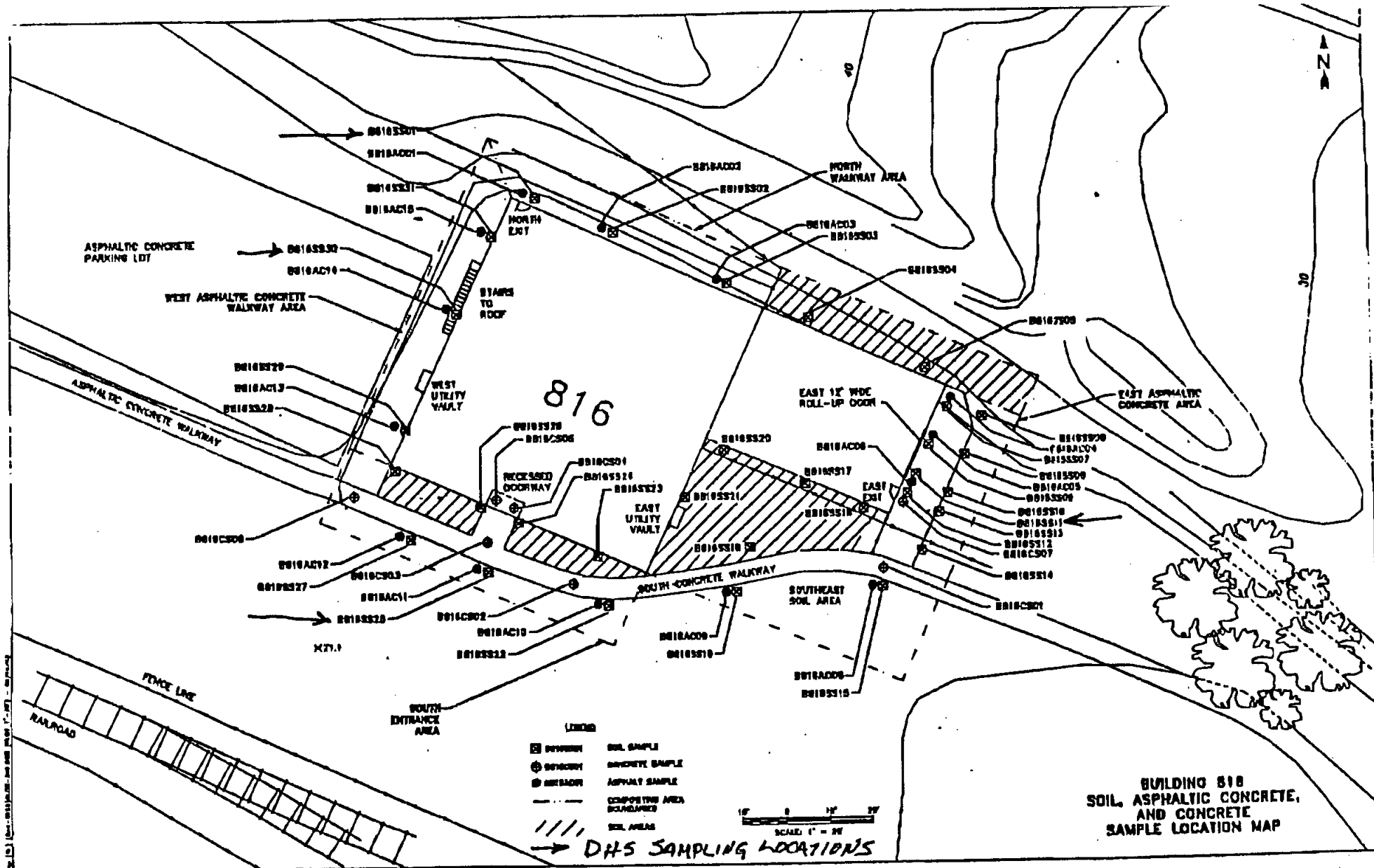
A background soil sample was selected about 25 yards south of Building 816. The soil sampling points selected were the sampling points previously sampled by the Navy. The Navy identification numbers were confirmed by map and the painted number by the disturbed ground. The samples were collected after removing the asphalt/concrete and large rocks from the sample point. After the collection the sampled openings were replaced with the asphalt/concrete and large rocks.

The samples and the description of the samples were as follows:
The attached map detailed the locations of the sampled points.

Sample Id	Description	Navy Id
70102	Background	Not Applicable
70103	Southeast	B816SS11
70104	North	B816SS01
70105	Northwest	B816SS30
70106	South	B816SS25

The soil samples were taken to the Department of Health Services, Sanitation and Radiation Laboratory, Berkeley, for tritium analysis on August 13, 1993 about 2:00 PM


Filbert Fong
Health Physicist



FAX
(916) 324 1380

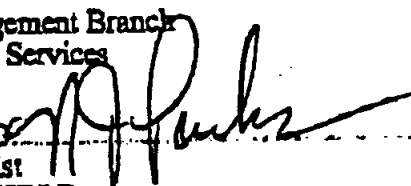
(510) 540 2515

Memorandum

Date: September 29, 1993

To: Mr. Fil Fong
Environmental Management Branch
Department of Health Services

From: Norris J. Parks, Ph.D.
Research Radiochemist
Radiochemistry Unit/SRLB



Subject: Hunter's Point Assays for Samples SS-11, SS-01, SS-30, SS-30, SS-25

The Radiological Analyses Results form from the Radiochemistry Unit; SRLB is appended. There are no indications of excess Tritium beta activity over natural background. The average values from duplicate assays of soil samples were all less than the average reagent blank values. The values are all below the LLD₉₅ value of 2.35 pCi/g for this dry soil method. Positive controls (spiked samples) showed that at least 89% of any ³H present would have recovered and detected if present in excess of the LLD₉₅.

RADIOLOGICAL ANALYSES RESULTS

Sampling Location: Hunters Point Annex
 Sampling Date/Time: August 13, 1993
 Sample Type: soil
 SRL Number: 6555 to 6559
 R Number: 70102 to 70106
 Date Received: August 13, 1993
 Contact: Fil Fong, RMB
 916-324-1378

<u>Sample</u>	<u>Description</u>	<u>Analysis</u>	<u>Result (pCi)</u>	<u>Isotopes</u>
6555-93	background/South bldg 816 HPA	LSC "	-0.10 ± 1.44	H-3
6556-93	SS-11	"	-0.17 ± 1.44	H-3
6557-93	SS-01	"	-0.49 ± 1.44	H-3
6558-93	SS-30	"	-0.28 ± 1.44	H-3
6559-93	SS-23	"	-0.81 ± 1.47	H-3

The results are comparable to the laboratory background soil, which was analyzed with the samples.

The lower level of detection for this analysis was 2.38 pCi/g.